

DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS
WASHINGTON, D. C.

Letter
Circular
LC 114

(March 25, 1924)

(Abridged)

U. S. PETROLEUM OIL TABLE

Prepared by

The U. S. Bureau of Standards

VOLUME AT 60° F. OCCUPIED BY UNIT VOLUME AT INDICATED TEMPERATURE

This table shows the volume occupied at 60° F. by a quantity of oil of any commercial grade occupying unit volume at the indicated temperatures. For example, if a volume of commercial motor gasoline is measured at 105° F., 1 gallon measured at this temperature will occupy .9726 gallons at 60° F.

The values given in the body of the table are in the form of "Multipliers", that is, the volume of oil of a certain commercial grade at the indicated temperature multiplied by the corresponding factor in the table equals the volume at 60° F. For example, if a volume of 5600 gallons of commercial motor gasoline is measured at 105° F., the volume at 60° F. equals $5600 \times .9726$ or 5446.56 gallons.

This table can also be used to calculate the percentage change of volume to reduce to 60° F. The percentage factor is 100 times the difference between the tabulated value and unity. For example, in the case given above, the percentage factor is $100(1.000 - 0.9726) = 2.74$. That is, any volume of a commercial motor gasoline measured at 105° F. will decrease in volume by 2.74 percent on being reduced to a temperature of 60° F. For observed temperatures below 60° F. the volume correction should be added to the measured volumes; for temperatures above 60° F. it should be subtracted.

This table is an abridgment of Table 2, Circular No. 154, Bureau of Standards, and is intended to cover the bulk of present commercial grades of oils. For any oils not adequately covered by the abridged table the complete table should be used.

The abridged table is based on the following assumed average values for the A. P. I. gravity of each group:

<u>Group</u>	<u>A. P. I.</u>
Fuel oils	16
Lubricating oils	26
Gas oils	32
Kerosene	43
Motor gasoline	58
Export "	62
High Test gasoline	70
Casing head gasoline	86

卷之三

卷之三

¹ See, for example, the discussion of the "right to be forgotten" in the European Union's General Data Protection Regulation (GDPR), Article 17(1).

• The following table, given in *Notes*,

Observed tempera- ture in °F	Fuel Oils	Lubri- cating Oils	Gas Oils	Kero- sene	Motor gasoline	Export gasoline	High Test gasoline	Casing head gasoline
Volume at 60°F occupied by unit volume at indicated temperature								
0	1.0203	1.0249	1.0261	1.0294	1.0361	1.0378	1.0411	1.0470
1	1.0229	1.0245	1.0257	1.0289	1.0355	1.0372	1.0404	1.0468
2	1.0225	1.0241	1.0252	1.0284	1.0349	1.0366	1.0397	1.0460
3	1.0221	1.0236	1.0248	1.0280	1.0343	1.0359	1.0391	1.0453
4	1.0217	1.0233	1.0243	1.0275	1.0337	1.0353	1.0384	1.0445
5	1.0213	1.0228	1.0239	1.0270	1.0331	1.0347	1.0377	1.0437
6	1.0209	1.0224	1.0235	1.0265	1.0325	1.0341	1.0370	1.0429
7	1.0205	1.0220	1.0230	1.0260	1.0319	1.0335	1.0363	1.0421
8	1.0201	1.0215	1.0226	1.0255	1.0313	1.0328	1.0357	1.0414
9	1.0197	1.0211	1.0221	1.0250	1.0307	1.0322	1.0350	1.0406
10	1.0193	1.0207	1.0217	1.0245	1.0301	1.0316	1.0343	1.0398
11	1.0189	1.0203	1.0213	1.0240	1.0295	1.0310	1.0336	1.0390
12	1.0185	1.0199	1.0208	1.0235	1.0289	1.0304	1.0329	1.0382
13	1.0181	1.0194	1.0204	1.0231	1.0283	1.0297	1.0323	1.0375
14	1.0177	1.0190	1.0199	1.0226	1.0277	1.0291	1.0316	1.0367
15	1.0173	1.0186	1.0195	1.0221	1.0271	1.0285	1.0309	1.0359
16	1.0169	1.0182	1.0191	1.0216	1.0265	1.0279	1.0302	1.0351
17	1.0165	1.0178	1.0187	1.0211	1.0259	1.0272	1.0295	1.0343
18	1.0162	1.0173	1.0183	1.0206	1.0253	1.0266	1.0289	1.0335
19	1.0158	1.0169	1.0177	1.0201	1.0247	1.0259	1.0282	1.0327
20	1.0154	1.0165	1.0173	1.0196	1.0241	1.0253	1.0275	1.0319
21	1.0150	1.0161	1.0169	1.0191	1.0235	1.0247	1.0268	1.0311
22	1.0146	1.0157	1.0165	1.0186	1.0229	1.0241	1.0261	1.0303
23	1.0143	1.0152	1.0160	1.0182	1.0223	1.0234	1.0255	1.0296
24	1.0139	1.0148	1.0156	1.0177	1.0217	1.0228	1.0248	1.0288
25	1.0135	1.0144	1.0152	1.0172	1.0211	1.0222	1.0241	1.0280
26	1.0131	1.0140	1.0148	1.0167	1.0205	1.0216	1.0234	1.0272
27	1.0127	1.0136	1.0143	1.0162	1.0199	1.0209	1.0237	1.0264
28	1.0124	1.0132	1.0139	1.0157	1.0193	1.0203	1.0221	1.0256
29	1.0120	1.0128	1.0134	1.0152	1.0187	1.0196	1.0214	1.0248
30	1.0116	1.0124	1.0130	1.0147	1.0181	1.0190	1.0207	1.0240
31	1.0112	1.0120	1.0126	1.0142	1.0175	1.0184	1.0200	1.0232
32	1.0108	1.0116	1.0121	1.0137	1.0169	1.0178	1.0193	1.0224
33	1.0104	1.0111	1.0117	1.0133	1.0163	1.0171	1.0186	1.0216
34	1.0100	1.0107	1.0112	1.0128	1.0157	1.0165	1.0179	1.0208
35	1.0096	1.0103	1.0108	1.0123	1.0151	1.0159	1.0172	1.0200
36	1.0092	1.0099	1.0104	1.0118	1.0145	1.0153	1.0165	1.0192
37	1.0088	1.0095	1.0100	1.0113	1.0139	1.0146	1.0158	1.0184
38	1.0085	1.0091	1.0095	1.0108	1.0133	1.0140	1.0152	1.0176
39	1.0081	1.0087	1.0091	1.0103	1.0127	1.0133	1.0145	1.0168
40	1.0077	1.0083	1.0087	1.0098	1.0121	1.0127	1.0158	1.0160
41	1.0073	1.0079	1.0083	1.0093	1.0115	1.0121	1.0131	1.0158
42	1.0069	1.0075	1.0078	1.0088	1.0109	1.0114	1.0124	1.0144
43	1.0065	1.0070	1.0074	1.0084	1.0103	1.0108	1.0118	1.0166
44	1.0061	1.0066	1.0069	1.0079	1.0097	1.0101	1.0111	1.0128
45	1.0057	1.0062	1.0065	1.0074	1.0091	1.0095	1.0104	1.0120
46	1.0053	1.0058	1.0061	1.0069	1.0085	1.0089	1.0097	1.0112
47	1.0049	1.0054	1.0056	1.0064	1.0079	1.0083	1.0090	1.0104
48	1.0046	1.0049	1.0052	1.0059	1.0074	1.0076	1.0083	1.0096
49	1.0042	1.0045	1.0047	1.0054	1.0066	1.0070	1.0076	1.0088
50	1.0038	1.0041	1.0043	1.0049	1.0060	1.0064	1.0069	1.0080
51	1.0034	1.0037	1.0039	1.0044	1.0054	1.0058	1.0062	1.0072
52	1.0030	1.0033	1.0035	1.0039	1.0048	1.0051	1.0055	1.0064
53	1.0027	1.0028	1.0030	1.0035	1.0042	1.0045	1.0049	1.0056
54	1.0023	1.0024	1.0026	1.0030	1.0036	1.0038	1.0042	1.0048
55	1.0019	1.0020	1.0022	1.0025	1.0030	1.0032	1.0035	1.0040
56	1.0015	1.0015	1.0018	1.0020	1.0024	1.0026	1.0028	1.0032
57	1.0011	1.0012	1.0013	1.0015	1.0018	1.0019	1.0021	1.0024
58	1.0008	1.0008	1.0009	1.0010	1.0012	1.0013	1.0014	1.0015
59	1.0004	1.0004	1.0004	1.0005	1.0006	1.0006	1.0007	1.0008
60	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
61	0.9996	0.9996	0.9996	0.9995	0.9994	0.9994	0.9993	0.9995
62	0.9992	0.9992	0.9991	0.9990	0.9988	0.9987	0.9986	0.9984
63	0.9988	0.9988	0.9987	0.9985	0.9982	0.9981	0.9979	0.9970
64	0.9985	0.9984	0.9983	0.9980	0.9976	0.9974	0.9972	0.9968

Category	Sub-Category	Item	Quantity	Unit	Unit Price	Total Price	Notes
Food	Produce	Apples	50	kg	100.00	5000.00	
Food	Produce	Bananas	30	kg	150.00	4500.00	
Food	Produce	Cantaloupe	20	kg	200.00	4000.00	
Food	Produce	Carrots	100	kg	50.00	5000.00	
Food	Produce	Cucumbers	50	kg	120.00	6000.00	
Food	Produce	Onions	100	kg	80.00	8000.00	
Food	Produce	Potatoes	200	kg	100.00	20000.00	
Food	Produce	Tomatoes	150	kg	100.00	15000.00	
Food	Produce	Watermelons	30	kg	300.00	9000.00	
Food	Meat	Beef	50	kg	200.00	10000.00	
Food	Meat	Pork	30	kg	180.00	5400.00	
Food	Meat	Lamb	20	kg	250.00	5000.00	
Food	Meat	Chicken	100	kg	100.00	10000.00	
Food	Meat	Turkey	50	kg	150.00	7500.00	
Food	Meat	Pork	100	kg	120.00	12000.00	
Food	Meat	Beef	80	kg	220.00	17600.00	
Food	Meat	Pork	60	kg	180.00	10800.00	
Food	Meat	Lamb	40	kg	250.00	10000.00	
Food	Meat	Chicken	90	kg	100.00	9000.00	
Food	Meat	Turkey	40	kg	150.00	6000.00	
Food	Meat	Pork	70	kg	120.00	8400.00	
Food	Meat	Beef	50	kg	220.00	11000.00	
Food	Meat	Pork	30	kg	180.00	5400.00	
Food	Meat	Lamb	20	kg	250.00	5000.00	
Food	Meat	Chicken	80	kg	100.00	8000.00	
Food	Meat	Turkey	30	kg	150.00	4500.00	
Food	Meat	Pork	60	kg	120.00	7200.00	
Food	Meat	Beef	40	kg	220.00	8800.00	
Food	Meat	Pork	20	kg	180.00	3600.00	
Food	Meat	Lamb	10	kg	250.00	2500.00	
Food	Meat	Chicken	50	kg	100.00	5000.00	
Food	Meat	Turkey	20	kg	150.00	3000.00	
Food	Meat	Pork	30	kg	120.00	3600.00	
Food	Meat	Beef	10	kg	220.00	2200.00	
Food	Meat	Pork	10	kg	180.00	1800.00	
Food	Meat	Lamb	5	kg	250.00	1250.00	
Food	Meat	Chicken	20	kg	100.00	2000.00	
Food	Meat	Turkey	10	kg	150.00	1500.00	
Food	Meat	Pork	10	kg	120.00	1200.00	
Food	Meat	Beef	5	kg	220.00	1100.00	
Food	Meat	Pork	5	kg	180.00	900.00	
Food	Meat	Lamb	2	kg	250.00	500.00	
Food	Meat	Chicken	10	kg	100.00	1000.00	
Food	Meat	Turkey	5	kg	150.00	750.00	
Food	Meat	Pork	5	kg	120.00	600.00	
Food	Meat	Beef	2	kg	220.00	440.00	
Food	Meat	Pork	2	kg	180.00	360.00	
Food	Meat	Lamb	1	kg	250.00	250.00	
Food	Meat	Chicken	5	kg	100.00	500.00	
Food	Meat	Turkey	2	kg	150.00	300.00	
Food	Meat	Pork	2	kg	120.00	240.00	
Food	Meat	Beef	1	kg	220.00	220.00	
Food	Meat	Pork	1	kg	180.00	180.00	
Food	Meat	Lamb	0.5	kg	250.00	125.00	
Food	Meat	Chicken	2	kg	100.00	200.00	
Food	Meat	Turkey	1	kg	150.00	150.00	
Food	Meat	Pork	1	kg	120.00	120.00	
Food	Meat	Beef	0.5	kg	220.00	110.00	
Food	Meat	Pork	0.5	kg	180.00	90.00	
Food	Meat	Lamb	0.25	kg	250.00	62.50	
Food	Meat	Chicken	1	kg	100.00	100.00	
Food	Meat	Turkey	0.5	kg	150.00	75.00	
Food	Meat	Pork	0.5	kg	120.00	60.00	
Food	Meat	Beef	0.25	kg	220.00	55.00	
Food	Meat	Pork	0.25	kg	180.00	45.00	
Food	Meat	Lamb	0.125	kg	250.00	31.25	
Food	Meat	Chicken	0.5	kg	100.00	50.00	
Food	Meat	Turkey	0.25	kg	150.00	25.00	
Food	Meat	Pork	0.25	kg	120.00	30.00	
Food	Meat	Beef	0.125	kg	220.00	27.50	
Food	Meat	Pork	0.125	kg	180.00	22.50	
Food	Meat	Lamb	0.0625	kg	250.00	12.50	
Food	Meat	Chicken	0.25	kg	100.00	25.00	
Food	Meat	Turkey	0.125	kg	150.00	18.75	
Food	Meat	Pork	0.125	kg	120.00	18.75	
Food	Meat	Beef	0.0625	kg	220.00	9.375	
Food	Meat	Pork	0.0625	kg	180.00	8.75	
Food	Meat	Lamb	0.03125	kg	250.00	4.375	
Food	Meat	Chicken	0.125	kg	100.00	12.50	
Food	Meat	Turkey	0.0625	kg	150.00	9.375	
Food	Meat	Pork	0.0625	kg	120.00	9.375	
Food	Meat	Beef	0.03125	kg	220.00	4.6875	
Food	Meat	Pork	0.03125	kg	180.00	4.375	
Food	Meat	Lamb	0.015625	kg	250.00	2.34375	
Food	Meat	Chicken	0.0625	kg	100.00	6.25	
Food	Meat	Turkey	0.03125	kg	150.00	4.6875	
Food	Meat	Pork	0.03125	kg	120.00	4.6875	
Food	Meat	Beef	0.015625	kg	220.00	2.34375	
Food	Meat	Pork	0.015625	kg	180.00	2.34375	
Food	Meat	Lamb	0.0078125	kg	250.00	1.171875	
Food	Meat	Chicken	0.03125	kg	100.00	3.125	
Food	Meat	Turkey	0.015625	kg	150.00	2.34375	
Food	Meat	Pork	0.015625	kg	120.00	2.34375	
Food	Meat	Beef	0.0078125	kg	220.00	1.171875	
Food	Meat	Pork	0.0078125	kg	180.00	1.171875	
Food	Meat	Lamb	0.00390625	kg	250.00	0.5859375	
Food	Meat	Chicken	0.015625	kg	100.00	1.5625	
Food	Meat	Turkey	0.0078125	kg	150.00	1.171875	
Food	Meat	Pork	0.0078125	kg	120.00	1.171875	
Food	Meat	Beef	0.00390625	kg	220.00	0.5859375	
Food	Meat	Pork	0.00390625	kg	180.00	0.5859375	
Food	Meat	Lamb	0.001953125	kg	250.00	0.29296875	
Food	Meat	Chicken	0.0078125	kg	100.00	0.78125	
Food	Meat	Turkey	0.00390625	kg	150.00	0.5859375	
Food	Meat	Pork	0.00390625	kg	120.00	0.5859375	
Food	Meat	Beef	0.001953125	kg	220.00	0.29296875	
Food	Meat	Pork	0.001953125	kg	180.00	0.29296875	
Food	Meat	Lamb	0.0009765625	kg	250.00	0.146484375	
Food	Meat	Chicken	0.00390625	kg	100.00	0.390625	
Food	Meat	Turkey	0.001953125	kg	150.00	0.29296875	
Food	Meat	Pork	0.001953125	kg	120.00	0.29296875	
Food	Meat	Beef	0.0009765625	kg	220.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	180.00	0.146484375	
Food	Meat	Lamb	0.00048828125	kg	250.00	0.0732203125	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.00048828125	kg	180.00	0.0732203125	
Food	Meat	Lamb	0.000244140625	kg	250.00	0.03661015625	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.00048828125	kg	180.00	0.0732203125	
Food	Meat	Lamb	0.000244140625	kg	250.00	0.03661015625	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.00048828125	kg	180.00	0.0732203125	
Food	Meat	Lamb	0.000244140625	kg	250.00	0.03661015625	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.00048828125	kg	180.00	0.0732203125	
Food	Meat	Lamb	0.000244140625	kg	250.00	0.03661015625	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.00048828125	kg	180.00	0.0732203125	
Food	Meat	Lamb	0.000244140625	kg	250.00	0.03661015625	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.00048828125	kg	180.00	0.0732203125	
Food	Meat	Lamb	0.000244140625	kg	250.00	0.03661015625	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.00048828125	kg	180.00	0.0732203125	
Food	Meat	Lamb	0.000244140625	kg	250.00	0.03661015625	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.00048828125	kg	180.00	0.0732203125	
Food	Meat	Lamb	0.000244140625	kg	250.00	0.03661015625	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.00048828125	kg	180.00	0.0732203125	
Food	Meat	Lamb	0.000244140625	kg	250.00	0.03661015625	
Food	Meat	Chicken	0.001953125	kg	100.00	0.1953125	
Food	Meat	Turkey	0.0009765625	kg	150.00	0.146484375	
Food	Meat	Pork	0.0009765625	kg	120.00	0.146484375	
Food	Meat	Beef	0.00048828125	kg	220.00	0.0732203125	
Food	Meat	Pork	0.				

Observed tempera- ture in °F	Fuel Oils	Lubri- cating Oils	Gas Oils	Kero- sene	Motor gasoline	Export gasoline	High Test gasoline	Casing head gasoline
Volume at 60°F occupied by unit volume at indicated temperature								
65	0.9981	0.9980	0.9978	0.9975	0.9970	0.9968	0.9965	0.9960
66	.9977	.9976	.9974	.9970	.9964	.9962	.9958	.9952
67	.9973	.9972	.9970	.9965	.9957	.9955	.9951	.9944
68	.9970	.9967	.9965	.9961	.9951	.9949	.9945	.9935
69	.9966	.9963	.9961	.9956	.9945	.9942	.9938	.9927
70	.9962	.9959	.9957	.9951	.9939	.9936	.9931	.9919
71	.9958	.9955	.9953	.9946	.9933	.9930	.9924	.9911
72	.9954	.9951	.9949	.9941	.9927	.9923	.9917	.9903
73	.9951	.9947	.9944	.9936	.9921	.9917	.9910	.9895
74	.9947	.9943	.9940	.9931	.9915	.9910	.9903	.9887
75	.9943	.9939	.9936	.9926	.9909	.9904	.9896	.9879
76	.9939	.9935	.9932	.9921	.9903	.9898	.9889	.9871
77	.9935	.9931	.9927	.9916	.9897	.9892	.9882	.9863
78	.9932	.9926	.9923	.9912	.9891	.9885	.9875	.9854
79	.9928	.9922	.9918	.9907	.9885	.9879	.9868	.9846
80	.9924	.9918	.9914	.9902	.9879	.9873	.9861	.9838
81	.9920	.9914	.9910	.9897	.9873	.9867	.9854	.9830
82	.9916	.9910	.9905	.9892	.9867	.9860	.9847	.9822
83	.9913	.9906	.9901	.9887	.9860	.9854	.9840	.9814
84	.9909	.9902	.9896	.9882	.9854	.9847	.9833	.9806
85	.9905	.9898	.9892	.9877	.9848	.9841	.9826	.9798
86	.9901	.9894	.9888	.9872	.9842	.9835	.9819	.9790
87	.9897	.9890	.9883	.9867	.9836	.9828	.9812	.9782
88	.9894	.9885	.9879	.9863	.9830	.9822	.9806	.9773
89	.9890	.9881	.9874	.9858	.9824	.9815	.9799	.9765
90	.9886	.9877	.9870	.9853	.9818	.9809	.9792	.9757
91	.9882	.9873	.9866	.9848	.9812	.9803		
92	.9878	.9869	.9862	.9843	.9806	.9796		
93	.9875	.9865	.9857	.9838	.9800	.9790		
94	.9871	.9861	.9853	.9833	.9794	.9783		
95	.9867	.9857	.9849	.9828	.9788	.9777		
96	.9863	.9853	.9845	.9823	.9782	.9771		
97	.9860	.9849	.9841	.9818	.9776	.9764		
98	.9856	.9845	.9836	.9814	.9769	.9758		
99	.9853	.9841	.9832	.9809	.9763	.9751		
100	.9849	.9837	.9828	.9804	.9757	.9745		
101	.9845	.9833	.9824	.9799	.9751	.9739		
102	.9841	.9829	.9819	.9794	.9745	.9732		
103	.9838	.9824	.9815	.9789	.9738	.9726		
104	.9834	.9820	.9810	.9784	.9732	.9719		
105	.9830	.9816	.9806	.9779	.9726	.9713		
106	.9826	.9812	.9802	.9774	.9720	.9707		
107	.9823	.9808	.9797	.9769	.9714	.9700		
108	.9819	.9804	.9793	.9765	.9708	.9694		
109	.9816	.9800	.9788	.9760	.9702	.9687		
110	.9812	.9796	.9784	.9755	.9696	.9681		
111	.9808	.9792	.9780	.9750	.9690	.9675		
112	.9804	.9788	.9776	.9745	.9684	.9668		
113	.9800	.9784	.9771	.9740	.9678	.9662		
114	.9796	.9780	.9767	.9735	.9672	.9655		
115	.9792	.9776	.9763	.9730	.9666	.9649		
116	.9788	.9772	.9759	.9725	.9660	.9643		
117	.9785	.9768	.9755	.9720	.9654	.9636		
118	.9781	.9764	.9750	.9716	.9647	.9630		
119	.9778	.9760	.9746	.9711	.9641	.9623		
120	.9774	.9756	.9742	.9706	.9635	.9617		
121	.9770	.9752	.9738	.9701	.9629	.9611		
122	.9766	.9748	.9733	.9696	.9623	.9604		
123	.9763	.9744	.9729	.9691	.9617	.9598		
124	.9759	.9740	.9724	.9686	.9611	.9591		
125	.9755	.9736	.9720	.9681	.9605	.9585		
126	.9751	.9732	.9716	.9676				
127	.9748	.9728	.9712	.9671				
128	.9744	.9723	.9707	.9667				
129	.9741	.9719	.9703	.9662				

¹⁰ See *U.S. v. Ladd, 100 F.3d 123, 130 (1st Cir. 1996)* and *U.S. v. Gandy, 100 F.3d 123, 130 (1st Cir. 1996)*.

1950.	1951.	1952.	1953.	1954.	1955.	1956.	1957.	1958.
1950.	1951.	1952.	1953.	1954.	1955.	1956.	1957.	1958.
1950.	1951.	1952.	1953.	1954.	1955.	1956.	1957.	1958.
1950.	1951.	1952.	1953.	1954.	1955.	1956.	1957.	1958.
1950.	1951.	1952.	1953.	1954.	1955.	1956.	1957.	1958.

Year.	1870.	1871.	1872.	1873.	1874.	1875.	1876.
1870.	19,600.	35,000.	30,000.	18,000.	11,000.	8,000.	6,000.
1871.	30,000.	35,000.	30,000.	18,000.	11,000.	8,000.	6,000.
1872.	30,000.	35,000.	30,000.	18,000.	11,000.	8,000.	6,000.
1873.	30,000.	35,000.	30,000.	18,000.	11,000.	8,000.	6,000.
1874.	30,000.	35,000.	30,000.	18,000.	11,000.	8,000.	6,000.
1875.	30,000.	35,000.	30,000.	18,000.	11,000.	8,000.	6,000.
1876.	30,000.	35,000.	30,000.	18,000.	11,000.	8,000.	6,000.

କାର୍ତ୍ତିକ.	କଣ୍ଠା.	ପ୍ରାଚୀ.	୩୪୪୮.	ରୋତ୍ତ.	ଲିଲାତି.	କର୍ମିକ.	ଶେଷ.
ପାତ୍ରିକ.	ପାତ୍ରି.	ପାତ୍ରିକ.	୩୫୫୫.	ପାତ୍ରି.	ପାତ୍ରି.	ପାତ୍ରି.	ପାତ୍ରି.
ପ୍ରତି.	ପ୍ରତି.	ପ୍ରତି.	୩୫୦୮.	ପ୍ରତି.	ପ୍ରତି.	୦୩୫୮.	ପ୍ରତି.
ପ୍ରିଯ.	ପ୍ରିଯ.	ପ୍ରିଯ.	୩୫୫୫.	ପ୍ରିଯ.	ପ୍ରିଯ.	୦୩୫୮.	ପ୍ରିଯ.
ପ୍ରେମ.	ପ୍ରେମ.	ପ୍ରେମ.	୩୫୫୫.	ପ୍ରେମ.	ପ୍ରେମ.	୦୩୫୮.	ପ୍ରେମ.

8652.	1996.	2203.	2196.	2085.	1785.	1625.
2675.	2142.	2405.	2355.	2365.	2365.	2355.
2005.	2025.	2005.	1900.	1925.	1925.	1900.
1775.	1750.	1750.	1750.	1750.	1750.	1750.
1625.	1625.	1625.	1625.	1625.	1625.	1625.

५३६२.	५४५६.	५५५६.	५४६६.	५५६६.	५५६६.
५३६३.	५४५७.	५५५७.	५४६७.	५५६७.	५५६७.
५३६४.	५४५८.	५५५८.	५४६८.	५५६८.	५५६८.
५३६५.	५४५९.	५५५९.	५४६९.	५५६९.	५५६९.
५३६६.	५४६०.	५५६०.	५४६०.	५५६०.	५५६०.

ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.
ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.
ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.
ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.
ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.	ଶ୍ରୀମତୀ.

6570.	6570.	6570.	6570.	6570.	6570.
6570.	6570.	6570.	6570.	6570.	6570.
6570.	6570.	6570.	6570.	6570.	6570.

Observed
tempera-
ture in
°F

Fuel
Oils

Lubri-
cating
Oils

Gas
Oils

Kero-
sene

Volume at 60°F occupied by unit volume at indicated temperature

130	0.9737	0.9715	0.9699	0.9657
131	.9733	.9711	.9695	.9652
132	.9730	.9707	.9690	.9647
133	.9726	.9704	.9686	.9642
134	.9723	.9700	.9681	.9637
135	.9719	.9696	.9677	.9632
136	.9715	.9692	.9673	.9627
137	.9712	.9688	.9669	.9622
138	.9708	.9684	.9665	.9618
139	.9705	.9680	.9661	.9613
140	.9701	.9676	.9657	.9608
141	.9697	.9672	.9653	.9603
142	.9693	.9668	.9648	.9598
143	.9690	.9664	.9644	.9593
144	.9686	.9660	.9639	.9588
145	.9682	.9656	.9635	.9583
146	.9678	.9652	.9631	.9578
147	.9674	.9648	.9627	.9573
148	.9671	.9644	.9622	.9569
149	.9667	.9639	.9618	.9564
150	.9663	.9635	.9614	.9559
151	.9659	.9631	.9610	
152	.9656	.9627	.9605	
153	.9652	.9624	.9601	
154	.9649	.9620	.9596	
155	.9645	.9616	.9592	
156	.9641	.9612	.9589	
157	.9638	.9608	.9584	
158	.9634	.9604	.9579	
159	.9631	.9600	.9575	
160	.9627	.9596	.9571	
161	.9623	.9592	.9567	
162	.9620	.9588	.9563	
163	.9616	.9584	.9558	
164	.9613	.9580	.9554	
165	.9609	.9576	.9550	
166	.9605	.9572	.9546	
167	.9602	.9568	.9542	
168	.9598	.9564	.9537	
169	.9595	.9560	.9533	
170	.9591	.9556	.9529	
171	.9587	.9552	.9525	
172	.9584	.9548	.9520	
173	.9580	.9544	.9516	
174	.9577	.9540	.9511	
175	.9573	.9536	.9507	
176	.9569	.9532	.9503	
177	.9565	.9528	.9499	
178	.9562	.9524	.9494	
179	.9558	.9520	.9490	
180	.9554	.9516	.9486	
181	.9551	.9512	.9482	
182	.9547	.9508	.9478	
183	.9544	.9505	.9474	
184	.9540	.9501	.9470	
185	.9537	.9497	.9466	
186	.9533	.9493	.9462	
187	.9530	.9489	.9457	
188	.9526	.9485	.9453	
189	.9523	.9481	.9448	
190	.9519	.9477	.9444	
191	.9515	.9473	.9440	
192	.9512	.9469	.9436	
193	.9508	.9465	.9431	
194	.9505	.9461	.9427	
195	.9501	.9457	.9423	

Digitized by srujanika@gmail.com

निम्नलिखित संख्या	संक्षिप्त प्रकाशन	प्रकाशन संस्करण	प्रकाशन संस्करण
१८६८.	—	—	—
१८६९.	—	—	—
१८७०.	—	—	—
१८७१.	—	—	—
१८७२.	—	—	—

1000.	1000.	1000.	1000.
1000.	1000.	1000.	1000.
1000.	1000.	1000.	1000.
1000.	1000.	1000.	1000.
1000.	1000.	1000.	1000.

8066.	1000.	1000.	1000.
6211.	1000.	1000.	1000.
..	1000.	1000.	1000.
..	1000.	1000.	1000.

સાધન.	સા.	મિ.	સ.
સાધન.	સા.	મિ.	સ.
સાધન.	સા.	મિ.	સ.
સાધન.	સા.	મિ.	સ.
સાધન.	સા.	મિ.	સ.

ଓ. ১০৩.	১০৩.	১০৩.	১০৩.
১০৩.	১০৩.	১০৩.	১০৩.
১০৩.	১০৩.	১০৩.	১০৩.
১০৩.	১০৩.	১০৩.	১০৩.
১০৩.	১০৩.	১০৩.	১০৩.

SEARCHED	SEARCHED	SEARCHED
SEARCHED	SEARCHED	SEARCHED

1564.	संक्षिप्त	पृष्ठ. 1.
1565.	संक्षिप्त	पृष्ठ. 2.
1566.	संक्षिप्त	पृष्ठ. 3.
1567.	संक्षिप्त	पृष्ठ. 4.
1568.	संक्षिप्त	पृष्ठ. 5.

10000.	10000.	10000.
10000.	10000.	10000.
10000.	10000.	10000.
10000.	10000.	10000.
10000.	10000.	10000.

60000.	1.6.	19800.
6000.	1.6.	1980.
6000.	1.6.	1980.
6000.	1.6.	1980.